



## State of Utah

### Department of Natural Resources

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### Division of Oil, Gas & Mining

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*Lieutenant Governor*

January 4, 2006

Erwin Sass, General Manager  
Canyon Fuel Company, LLC  
P. O. Box 1029  
Wellington, Utah 84542

Subject: 2005 Midterm Permit Review, Canyon Fuel Company, LLC, Dugout Canyon Mine, C/007/0039, Task ID #2348, Outgoing File

Dear Mr. Sass:

As you are aware, the Division initiated a mid-term review of the Canyon Fuel Company, Dugout Canyon Mine mining and reclamation plan on October 13, 2005 by informing the Permittee of the process required under R645-303-211.

Seven areas of the MRP have been selected by the Division as part of the evaluation process. These include the following:

1. An AVS check to ensure that Ownership and Control information is current and correct.
2. A review to ensure that the Plan has been updated to reflect changes in the Utah Coal Regulatory Program, which have occurred subsequent to permit approval. One area of emphasis is to ensure compliance with the U. S. Fish and Wildlife Windy Gap Process.
3. A review of the plan to ensure that the requirements of all permit conditions, division orders, notice of violation abatement plans, and permittee initiated plan changes are appropriately incorporated into the plan document.
4. A review of the applicable portions of the permit to ensure that the plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.
5. A review of the bond to ensure that it is in order and that the cost estimate is accurate and is escalated to the appropriate year dollars.
6. A review of the MRP commitments for the subsidence control/monitoring plans and reporting requirements.

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7. The Division may conduct a technical site visit in conjunction with the assigned compliance inspector to document the status and effectiveness of operational, reclamation, and contemporaneous reclamation practices.

The Division has completed its initial review as of December 27, 2005. There are deficiencies that must be adequately addressed prior to concluding this evaluation of the Dugout Canyon mining and reclamation plan. A list of the technical deficiencies is included with this letter.

After each deficiency you will note the initials of the author identifying that deficiency. The reviewers assigned to this mid-term review, and their appropriate initials are as follows:

PWB	Priscilla Burton, Soils Scientist
WHW	Wayne Western, Bond
PHH	Peter Hess, Engineering
DWD	David Darby, Hydrology
JAE	Jerriann Ernstsens, Biology

The initials will help those individuals responding to the respective deficiencies by identifying those persons to whom they should address inquiries relative to your response. Peter Hess has been assigned as the team lead for this midterm permit review process.

In order for us to continue to conduct this mid-term permit review, please respond to these deficiencies by March 1, 2006.

If you have any questions, please call me at (801) 538-5286 or Peter Hess at (435) 613-1146 ext. 203.

Sincerely,

D. Wayne Hedberg  
Permit Supervisor

PHH/sd  
Enclosure  
cc: Price Field Office  
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## **Deficiency List**

Task ID #2348

**R645-301-231.400**, • The MRP must include surveyed volumes of all stockpiles at the Dugout Soldier Canyon Topsoil Storage Area. • The Division requests clarification of the storage location of the Area #5 soils described in Section 231.100 of the MRP. (PWB)

**R645-300-143**, Please clarify whether an as-built map was ever provided after construction of the culvert showing locations of steep slope soil removal (as per the commitment at the bottom of page 2-29 of the MRP). (PWB)

**R645-301-526.100**; In accordance with the requirements of R645-301-526, and 521.100, the Permittee must modify the statement on Chapter 5, page 5-32 to include a reference to the Pace Canyon County road as a pre-existing structure. (PHH)

**R645-301-525, Subsidence Control Plan**; the Permittee must submit the following:

- 1) The Permittee must analyze and submit a determination for the angle of draw study depicted on Plate 5-7, PROPOSED MINE SEQUENCE AND PLANNED SUBSIDENCE BOUNDARY, or state where that analysis can be found in the MRP. (PHH)
- 2) There is no discussion of the engineering design of the chain pillars used to develop the gate road entries of the Dugout Canyon Mines longwall panels. Are these to be yielding pillars, or non-yielding pillars? The Permittee needs to submit a geotechnical discussion on the design parameters of these pillars and their affect on the subsidence trough between adjacent longwall panels, including what affects may occur in the tension / compression zone paralleling the gate roads. (PHH)
- 3) The Permittee has implemented 500-foot barrier pillars between longwall panels to improve ground control and minimize coal bursts at the longwall face. The Permittee needs to submit a geotechnical discussion on the affect of these barriers on the subsidence trough, and the overall affect to the surface caused by these abutments. This discussion should evaluate critical panel width considerations, as well as other considerations that the mining engineer implements to minimize surface impacts from these abutments throughout the mining area. (PHH)
- 4) The currently approved plan allows for one subsidence monitoring point per longwall panel. The Permittee needs to submit justification as to why it is felt that the continued monitoring of the maximum depth of the subsidence trough is necessary. (PHH)

- 5) The approved plan states on Page 5-29 that visual surveys of the permit area are to be conducted on an annual basis. However, no documentation of these visual surveys has ever been submitted with the annual report. Therefore, the Division concludes that these surveys are not being conducted in accordance with the approved plan. (PHH)

**The Permittee must commit to and submit a written document describing the visual surveys that have been conducted for each monitoring year, beginning with the 2005 evaluation year. In addition, roads used to access hydrologic monitoring stations will be visually evaluated during monitoring activities. Documentation of these visual road evaluations must be submitted.** The Division recommends that road-monitoring locations be established such that the same location can be monitored over time, or until moved to the road surface over the adjacent panel. These documented visual surveys must be submitted as part of the annual subsidence monitoring report.

- 6) The Permittee needs to design a method to monitor subsidence cracks in the tension /compression zone that parallels the gate road entries outlining consecutively mined longwall panels. This must include a method of establishing the location of the tension / compression zone for observation purposes, the method of observation, the method of recording, and the method of reporting significant cracks to the Division. The Division feels that a significant crack is one in which soil resources could be lost, surface flows could be impacted, or persons or wildlife could be injured. (PHH)

**R645-301-525.700, Public Notice of Proposed Mining;** the Permittee must submit a revised Plate 5-7, which will depict the proposed mine sequence and planned subsidence boundary, as well as in place coal leases, and surface ownership delineations. This map is necessary to ensure that all surface owners receive the required six-month notice in advance of mining as required under the aforementioned R645 coal rule. This Plate must be resubmitted whenever a planned sequence change is made by the Permittee to the underground workings for whatever reason. (PHH)

**R645-301-731.720, Disturbed Area Diversions;** the Permittee needs to submit a revised Plate 7-5 depicting the locations of the two sediment traps in ditches DD-3 and DD-4, Dugout Canyon Mine main facilities area. These structures are depicted on Plate 5-2. (PHH)